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SUMMARY

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RESEARCH REQUIREMENTS AND TYPES OF INFORMATION NEEDED FOR AGRICULTURAL DEVELOPMENT PLANNING

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Research Requirements and Types of Information Needed for Agricultural Development Planning

by

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SUMMARY

1. The planning of agricultural development cannot wait the perfection of the data. It is important to initiate the process of planning, assembling the information available in relation to each successive step and taking the most rational decisions possible. Note should be taken in passing of the gaps in the data, and the optimum amount of resources should be allocated under the plan to research designed to fill them, with a view to the improvement of later planning efforts.

2. Information is required (a) to evaluate the resources available for agricultural production; (b) to increase understanding of the functioning of the agricultural sector and the problems being encountered by producers; and (c) to enable quantitative relationships to be applied in the planning process, e.g. as between inputs and outputs. The paper considers the data requirements in relation to steps in the planning process.

Estimation of demand and future requirements of agricultural products

3. Surveys on food consumption and nutrition should be conducted for representative samples of farm households and urban households, for different regions and socio-economic groups if necessary. They should preferably include data on food expenditures or be combined with household budget enquiries, to show patterns of food consumption and expenditure at different income levels. These studies would enable coefficients of income elasticity of demand to be derived for different products of agriculture. Special diet and nutrition surveys of the most vulnerable groups of the population would reveal special nutritional problems. For primary exporting countries, reviews of the likely future demand overseas for their agricultural exports are essential.

Projections of production of agricultural commodities

4. The starting point is to study the present pattern of agricultural production, by more or less homogeneous agricultural zones as far as possible, to permit the more rational projection of output zone by zone. Agricultural statistics are a basic need, although rough estimates may permit planning to begin. A national agricultural census should be undertaken as soon as possible on lines recommended by FAO, and the progressive improvement in coverage and reliability of annual agricultural statistics should be provided for in successive plans.

5. Research should be progressively developed on both the physical basis and the economics of farming. A map of current land use, however fragmentary at first, will provide a framework for research on physical resources (topography, climate, vegetation including forests, soils, water) as well as the economic environment of agriculture (land tenure, farm sizes, markets, farming systems). From such research maps of land use capabilities may be gradually prepared for the guidance of long-term planning. The planning of development in new land areas should provide for the necessary physical resource surveys. A program of farm management studies, to be repeated at intervals of several years, should be designed to record and analyse the patterns of input and output on representative samples of farms in the main farming regions. Such studies should identify factors of farm organization and farm practice associated with better than average productivity (or worse than average). Additional research projects in land tenure, farm credit, marketing and farm prices are usually needed to elucidate further some of

the problems or potentialities revealed.

The selection of development measures

6. This is the hard core of planning. The aim is to select the combination of measures and projects which, in the circumstances of the particular country or sub-region, will produce the greatest result in terms of the national objectives under the plan, with the utmost economy in the use of the scarce resources available.

7. The previously mentioned studies of land use, descriptions of the main farming systems and surveys of farm organization and management are basic sources of vital data for planning at this stage also. Especially valuable are analyses of the responses to material inputs on individual farms e.g. fertilizers and irrigation in progressive amounts, singly, together, and combined with other inputs such as better seed and disease control measures, applied to different crops in different regions of the country. Studies of farm labour and farm employment in different systems of farming are also useful. These types of research should, if possible, be pushed to the point where quantitative relationships between inputs and outputs can be derived as working tools of planning, to be used with judgement.

8. To provide a basis for assessing the likely response to economic measures and institutional reforms, research should be conducted at farm and village level on marketing channels and prices actually received by farmers for their products and prices paid for fertilizers and other inputs. The results of such research will be more informative if supplemented by field studies of farmers' indebtedness and sources of credit. Studies of the economic behaviour of farmers, particularly in relation to incentives (e.g. assured prices), disincentives (e.g. high share rents) and receptivity to new improved techniques, would also be highly relevant.

9. The economic appraisal of individual projects in development countries still leaves much to be desired. Research and case studies are called for to elucidate principles and to elaborate methodology.

Implementation and review of plans

10. Annual reviews are an essential part of the planning process. Research and evaluative studies are required also, especially to analyse in depth the reasons for cases of notable failure or success in the implementation of plan projects, with a view to the improvement of subsequent plans.

Perspective planning and long-term guidelines

11. A long look ahead, (15 to 20 years) is particularly important in agriculture since many of the changes that have to take place occur only slowly, and the returns on certain types of investment are a long time in coming. In this perspective, questions of basic resources loom larger, emphasizing the need for basic surveys of land, forest and water (including fishery) resources, and maps of land-use capabilities. In addition to resource surveys, long range reviews on market demand, both domestic and export, are essential to guide the development of farming systems towards products in continuing demand.

Reference

FAO and ECAFE, Report of the FAO/ECAFE Expert Group on Selected Aspects of Agricultural Planning in Asia and the Far East, Bangkok, 24 October to 4 November 1960.

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